



Grade 7

Mathematics

Constructed Response
Scoring Guides
Winter 1999

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Directions: Solve the following problem. There may be more than one way to answer correctly. Show as much of your work as possible.

Ms. Perez surveyed the 25 students in her seventh grade mathematics class. She asked each student the longest number of minutes spent on one phone call in the past week. The list displays the results of Ms. Perez' survey.

SURVEY RESULTS

10	8	3	10	5
3	20	8	10	15
37	15	50	20	8
12	12	20	15	5
10	37	10	50	50

- A Complete this frequency chart for the data.

LENGTH OF TELEPHONE CALLS

Number Of Minutes	Tally	Frequency
3	//	2
5	//	2
8	///	3
10		5
12	//	2
15	///	3
20	///	3
37	//	2
50	///	3

- B Find the median and mode of the data set.

12 ↑ 10 ↑

- C What interval (scale) is most appropriate to graph this data?

5 minutes
1 - 50

4 POINTS

Table, median mode and interval correct.

Directions: Solve the following problem. There may be more than one way to answer correctly. Show as much of your work as possible.

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SURVEY RESULTS

10	8	8	10	15
2	20	8	10	15
37	15	50	20	10
12	10	20	15	10
10	17	10	50	50

- A Complete this frequency chart for the data.

LENGTH OF TELEPHONE CALLS

Number Of Minutes	Tally	Frequency
3	//	2
5	//	2
8	///	3
10		5
12	//	2
15	///	3
20	///	3
37	//	2
50	///	3

- B Find the median and mode of the data set.

10 = mode
12 = median

- C What interval (scale) is most appropriate to graph this data?

A bar graph

3 POINTS

2 points for correct table; 1 point for correct median and mode; 0 points for incorrect interval

Directions: Solve the following problem. There may be more than one way to answer correctly. Show as much of your work as possible.

Ms. Perez surveyed the 25 students in her seventh grade mathematics class. She asked each student the longest number of minutes spent on one phone call in the past week. The list displays the results of Ms. Perez' survey.

SURVEY RESULTS

10	8	3	25	10	5
8	20	8	10	15	
37	15	50	20	8	
12	12	20	15	5	
10	27	10	50	50	

3355888 10101010
12 15 15 15 20 20 20
37 37 50 50 50

- A Complete this frequency chart for the data.

LENGTH OF TELEPHONE CALLS

Number Of Minutes	Tally	Frequency
✓ 3	//	2
✓ 5	1/	2
50	111	3
✓ 8	111	3
✓ 15	111	3
✓ 10		5
✓ 20	111	3
✓ 12	11	2
✓ 37	11	2

- B Find the median and ^{mode} of the data set.
The median is 12 and the mode is 10.

- C What interval (scale) is most appropriate to graph this data?

Circle graph

3 POINTS

2 points for correct table; 1 point for correct median and mode; 0 points for incorrect interval

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Ms. Perez surveyed the 25 students in her seventh grade mathematics class. She asked each student the longest number of minutes spent on one phone call in the past week. The list displays the results of Ms. Perez' survey.

SURVEY RESULTS

10	8	8	10	5
3	20	8	10	15
37	15	50	20	8
12	12	20	15	5
10	37	10	50	50

- A Complete this frequency chart for the data.

LENGTH OF TELEPHONE CALLS

Number Of Minutes	Tally	Frequency
3	//	2
5		2
8		3
10		5
12		2
15		3
20		3
37		2
50		3

- B Find the median and made of the data set.

3, 5, 8, 10, 12, 15, 20, 37, 50

- C What interval (scale) is most appropriate to graph this data?

you can go by the scale of twos.

2 POINTS

2 points for correct table; 0 points for incorrect median, mode and interval

Directions: Solve the following problem. There may be more than one way to answer correctly. Show as much of your work as possible.

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10	8	3	10	5
3	20	8	10	15
37	15	50	20	8
12	12	20	15	5
10	37	10	50	50

- A Complete this frequency chart for the data.

LENGTH OF TELEPHONE CALLS

Number Of Minutes	Tally	Frequency
3	//	2
5		2
8		3
12		2
10		5
15		3
20		3
37		2
50		3

- B Find the median and mode of the data set.

~~7~~ ~~8~~ ~~12~~ ~~10~~ ~~15~~ ~~20~~ ~~37~~ ~~50~~ Median Mode
 10 10

- C What interval (scale) is most appropriate to graph this data?

bar graph

2 POINTS

2 points for correct table; 0 points for incorrect median, correct mode and incorrect interval

Directions: Solve the following problem. There may be more than one way to answer correctly. Show as much of your work as possible.

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SURVEY RESULTS

10	8	8	10	3
9	20	8	10	15
37	15	50	20	8
12	12	20	15	5
10	37	10	50	50

- A Complete this frequency chart for the data.

LENGTH OF TELEPHONE CALLS

Number Of Minutes	Tally	Frequency
3	//	2
5		5
8		5
10		10
12		12
15		15
20		20
37		37
50		50

- B Find the median and mode of the data set.

median - 12

mode - 50

- C What interval (scale) is most appropriate to graph this data?

Bar graph

1 POINT

1 point for minutes listed correctly in table incorrect tally and frequency; 0 points for correct median but incorrect mode and interval

Directions: Solve the following problem. There may be more than one way to answer correctly. Show as much of your work as possible.

Ms. Perez surveyed the 25 students in her seventh grade mathematics class. She asked each student the longest number of minutes spent on one phone call in the past week. The list displays the results of Ms. Perez' survey.

SURVEY RESULTS

10	8	3	10	5
3	20	8	10	15
37	15	50	20	8
12	12	20	15	5
10	37	10	50	50

- A Complete this frequency chart for the data.

LENGTH OF TELEPHONE CALLS

Number Of Minutes	Tally	Frequency
3	//	2
5		4
8	 	7
15	 	14
20	 	19
12	 	11

- B Find the median and made of the data set.
- C What interval (scale) is most appropriate to graph this data?

0 POINTS

Incomplete table; median, mode and interval omitted

Directions: Solve the following problem. There may be more than one way to answer correctly. Show as much of your work as possible.

Ms. Perez surveyed the 25 students in her seventh grade mathematics class. She asked each student the longest number of minutes spent on one phone call in the past week. The list displays the results of Ms. Perez' survey.

SURVEY RESULTS

10	8	8	10	5
3	20	8	10	15
37	15	50	20	8
12	12	20	15	5
10	37	10	50	50

- A Complete this frequency chart for the data.

LENGTH OF TELEPHONE CALLS

Number Of Minutes	Tally	Frequency
3	//	2
4-4		0
5-10		10
11-16		5
17-22		3
23-28		0
29-34	I	1
35-40		0
41-50		3

0001233510

- B Find the median and mode of the data set.

Median = 2
mode = 0

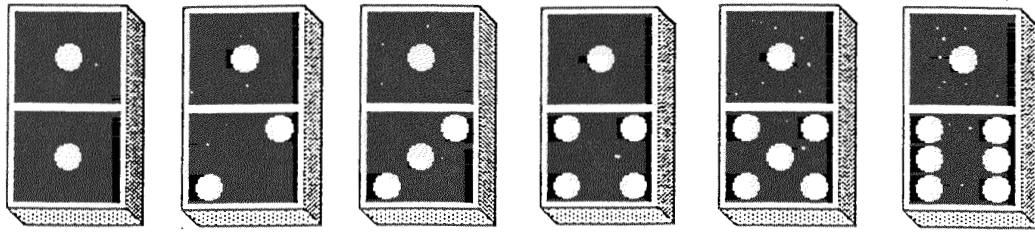
- C What interval (scale) is most appropriate to graph this data?

frequency table

0 POINTS

Number of minutes listed incorrectly;
median, mode and interval incorrect

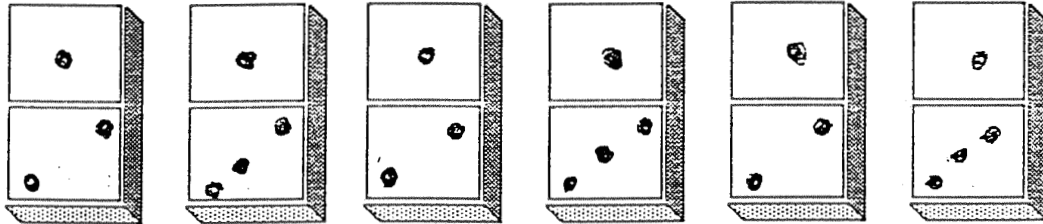
Directions: Solve the following problem. There may be more than one way to answer correctly. Show as much of your work as possible.



- A What pattern do these dominoes display?

They all have one on top. At the bottom it starts with one and keeps adding one on each till it reaches six.

- B Draw another domino pattern different from the one above.



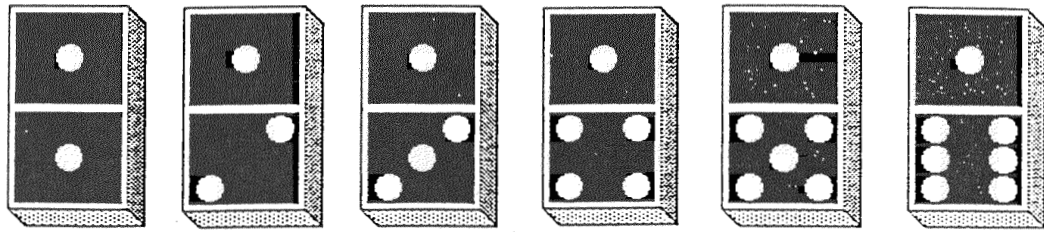
- C Describe the pattern you drew.

On the first, third, and fifth, domino's I drew one on top & two on bottom. On the second, fourth, and sixth, I put one on top & three on the bottom.

4 POINTS

Parts A, B and C correct.

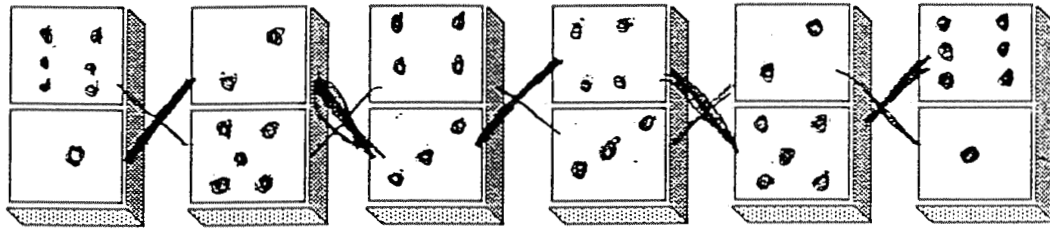
Directions: Solve the following problem. There may be more than one way to answer correctly. Show as much of your work as possible.



A What pattern do these dominoes display?

It goes 1, 2, 3, 4, 5, 6.

B Draw another domino pattern different from the one above.



C Describe the pattern you drew.

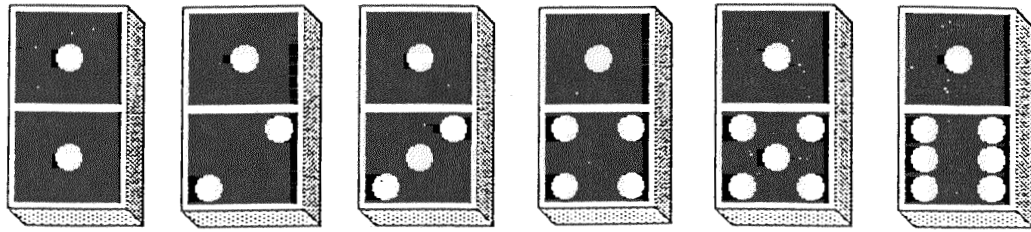
It goes up and down like

6 5 4 3 2 1
1 2 3 4 5 6

3 POINTS

Description in Part A incomplete. Parts B and C correct.

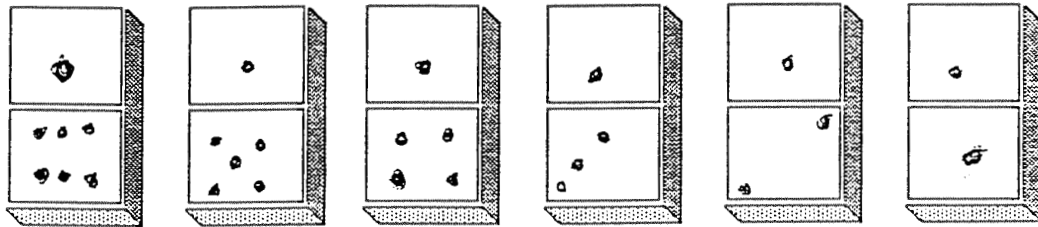
Directions: Solve the following problem. There may be more than one way to answer correctly. Show as much of your work as possible.



A What pattern do these dominoes display?

The dominoes display 1, 2, 3,
4, 5, 6.

B Draw another domino pattern different from the one above.



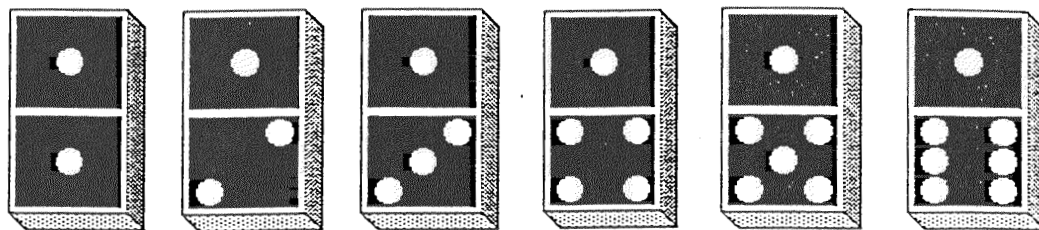
C Describe the pattern you drew.

I drew 6, 5, 4, 3, 2, 1.

2 POINTS

Parts A and C incomplete. Part B contains a correct, new pattern.

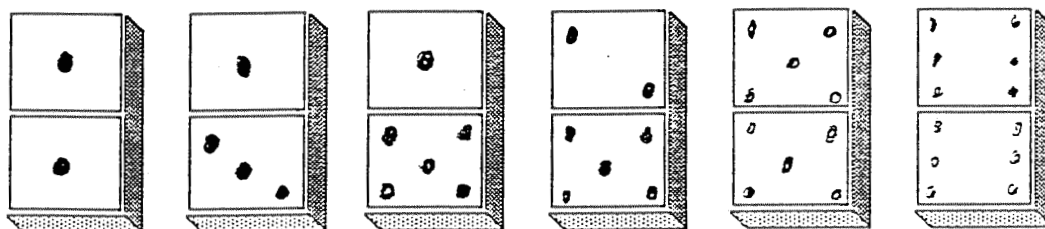
Directions: Solve the following problem. There may be more than one way to answer correctly. Show as much of your work as possible.



A What pattern do these dominoes display?

1-7

B Draw another domino pattern different from the one above.



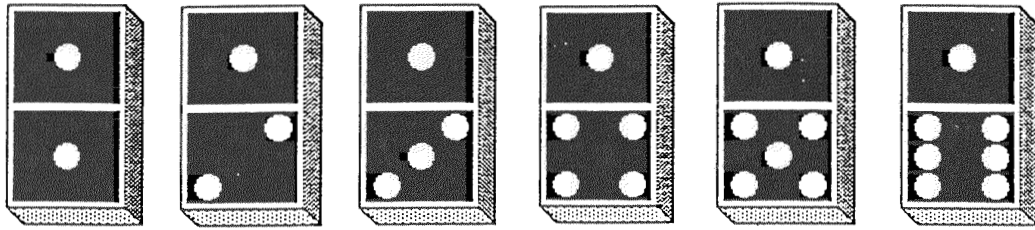
C Describe the pattern you drew.

The add up to Even numbers 2, 4, 6, 8, 10, 12

2 POINTS

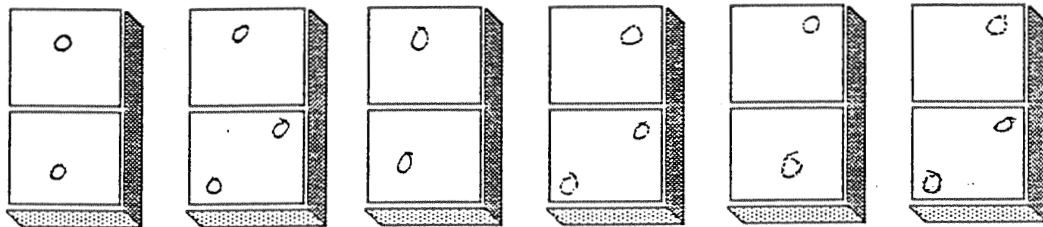
Part A incomplete. Part B contains minor error. Part C correct.

Directions: Solve the following problem. There may be more than one way to answer correctly. Show as much of your work as possible.



- A What pattern do these dominoes display?
Number order 1, 2, 3, 4, 5, 6, 7

- B Draw another domino pattern different from the one above.



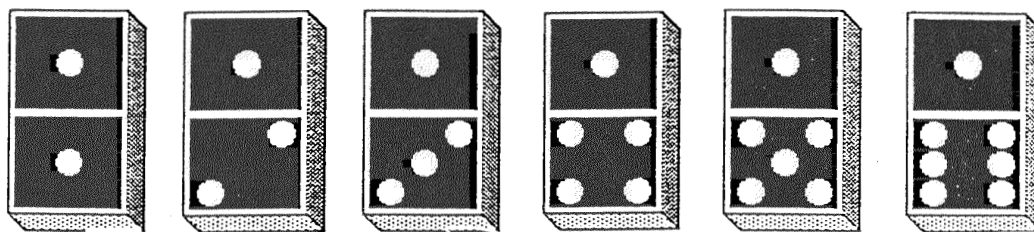
- C Describe the pattern you drew.

2, 3, 2, 3, 2, 3
 The Pattern I drew
 was Two, three, Two, Three, Two, Three, Two

1 POINT

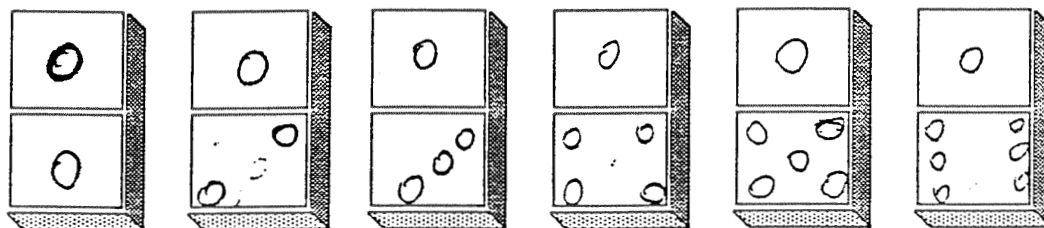
Part B Correct. Parts A and C incomplete.

Directions: Solve the following problem. There may be more than one way to answer correctly. Show as much of your work as possible.

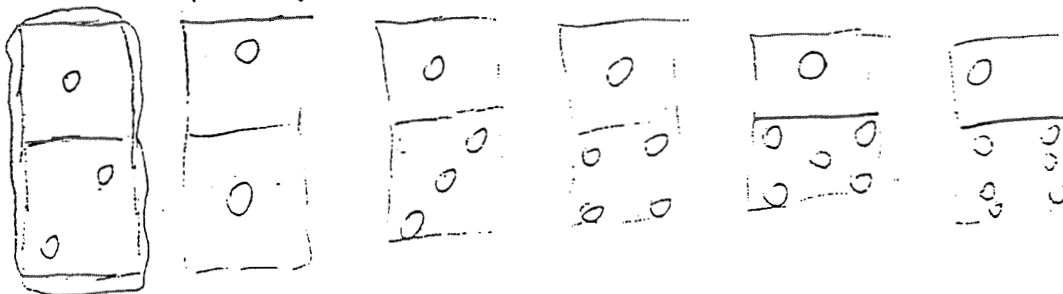


A What pattern do these dominoes display?

B Draw another domino pattern different from the one above.



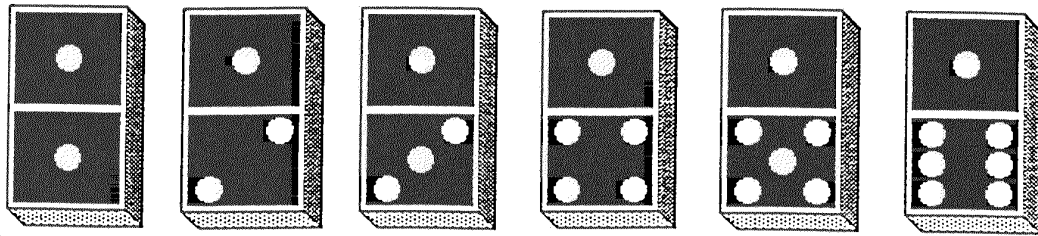
C Describe the pattern you drew.



0 POINTS

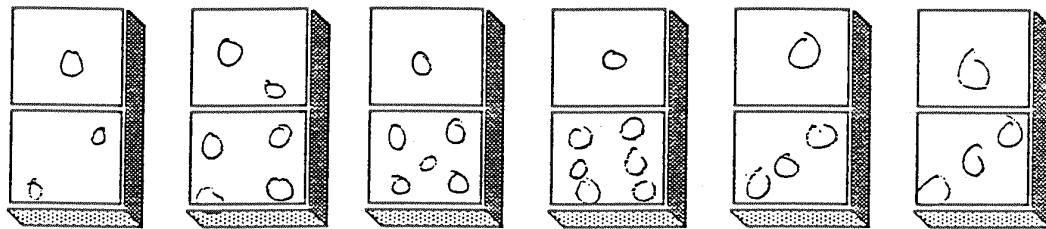
Part A omitted. Parts B and C repeat problem in Part A.

Directions: Solve the following problem. There may be more than one way to answer correctly. Show as much of your work as possible.



A What pattern do these dominoes display?

B Draw another domino pattern different from the one above.



C Describe the pattern you drew. *I use ever other 5 numbers to find my answer*

0 POINTS

Shows no understanding of the content of the problem.